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~~2 (Currently Amended)~~

A door, comprising:

a door frame; and

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a door leaf that swings on hinges in said door frame and receives an electrical input signal, said door leaf including front and rear cover panels with a first transducer device mounted therein, wherein said door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and by flexural waves propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for said first transducer device, which is entirely and exclusively affixed on the structural part at said first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, said front and/or said rear cover panel of the door leaf being part of said stiff, light structural component,

wherein the electrical input signal is conducted from said door frame to said door leaf over at least one hinge, and a second transducer is mounted in a second recess between said front and rear cover panels, wherein said second transducer is orientated to drive said rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and said first and second transducers are separated by a flexible damping support element.

3. (Cancelled) The door of claim 2, wherein a switching element interrupts the conduction of said electrical input signal when the door is open.

4. (Cancelled) A door, comprising:

— a door frame;

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a door leaf that swings on hinges in said door frame and receives an electrical input signal; said door leaf including front and rear cover panels with a first transducer device mounted therein; wherein said door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and by flexural waves propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for said first transducer device, which is entirely and exclusively affixed on the structural part at said first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, said front and/or said rear cover panel of the door leaf being part of said stiff, light structural component.

wherein corresponding contacts for signal conduction of said electrical input signal are situated on said door leaf and on said frame associated therewith.

5. (Cancelled) The door of claim 4, further comprising a flexible, damping support element situated between said front and rear cover panels.

6. (Cancelled) The door of claim 5, wherein said first transducer includes an electrodynamic inertial vibration driver.

7. (Cancelled) The door of claim 6, wherein said front and rear cover panels each have a surface that comprises criss-cross veneer.

10 8. (Currently Amended) A door, comprising:

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a door frame;

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a door leaf that swings on hinges in said door frame and receives an electrical input signal, said door leaf including front and rear cover panels with a first transducer device mounted therein, wherein said door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and by flexural waves propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for said first transducer device, which is entirely and exclusively affixed on the structural part at said first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, said front and/or said rear cover panel of the door leaf being part of said stiff, light structural component,

wherein said door leaf has at least one bass reflex opening, and

a second transducer mounted in a second recess between said front and rear cover panels,
wherein said second transducer is orientated to drive said rear parallel cover panel to resonance in
order to deliver a rearward launched acoustic output wave, and said first and second transducers are
separated by a flexible damping support element.

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2 (Previously Amended) The door of claim 2, wherein said front cover panel is equipped with a clamping device that maintains said stiff, light structural part of said front and/or rear cover panel under an adjustable amount of tension.

10.(Previously Cancelled)

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1. (Previously Amended) The door leaf of claim 1, wherein said first transducer comprises an electrodynamic inertial vibration driver.

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2. (Previously Amended) The door leaf of claim 1, wherein said first transducer comprises a piezoelectric driver.

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3. (Previously Amended) The door leaf of claim 1, wherein said stiff, light structural part comprises a nomex honeycomb structure.

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4. (Previously Amended) The door leaf of claim 1, wherein said stiff, light structural part comprises an aluminum honeycomb structure.

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5. (Previously Amended) The door leaf of claim 1, wherein said stiff, light structural part comprises a high resistance foam.

16. (Cancelled) The door leaf of claim 2, further comprising a second transducer mounted in a second recess between said front and rear cover panels, wherein said second transducer is orientated to drive said rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and said first and second transducers are separated by a flexible damping support element.

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7. (Previously Amended) The door leaf of claim 1, further comprising an adjustable clamping device that controls the amount of tension in the region of said stiff, light structural part to selectively change the acoustic properties of said stiff, light structural part.

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18.(Original) The door leaf of claim 17³, wherein said front cover and said rear cover include multi-layer pinewood veneer.

19.(Previously Cancelled)

20.(Cancelled) The door leaf of claim 8, further comprising a second transducer mounted in a second recess between said front and rear cover panels, wherein said second transducer is orientated to drive said rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and said first and second transducers are separated by a flexible damping support element.

11 21.(Previously Added) The door leaf of claim 10¹⁰ further comprising an adjustable clamping device that controls the amount of tension in the region of said stiff, light structural part to selectively change the acoustic properties of said stiff, light structural part.

12 22.(Previously Added) The door leaf of claim 10¹¹⁰, wherein said stiff, light structural part comprises a nomex honeycomb structure.

23.(Cancelled) The door of claim 8, further comprising a flexible, damping support element situated between said front and rear cover panels.

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24.(New) A door, comprising:
a door frame; and

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a door leaf that swings on hinges in said door frame and receives an electrical input signal, said door leaf including front and rear cover panels with a first transducer device mounted therein, wherein said door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and by flexural waves propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for said first transducer device, which is affixed on the structural part at said first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, said front and/or said rear cover panel of the door leaf being part of said stiff, light structural component,

wherein the electrical input signal is conducted from said door frame to said door leaf over at least one hinge, and a second transducer is mounted in a second recess between said front and rear cover panels, wherein said second transducer is orientated to drive said rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and said first and second transducers are separated by a flexible damping support element.

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/ 14 (New) The door of claim 13, wherein said first transducer includes an electrodynamic inertial vibration driver.

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/ 15 (New) The door of claim 13, wherein said front cover panel is equipped with a clamping device that maintains said stiff, light structural part of said front and/or rear cover panel under an adjustable amount of tension.

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~~27~~ (New)

The door leaf of claim ~~24~~¹³³, further comprising an adjustable clamping device that controls the amount of tension in the region of said stiff, light structural part to selectively change the acoustic properties of said stiff, light structural part.

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~~28~~ (New)

The door leaf of claim ~~24~~¹³, wherein said first transducer comprises a piezoelectric driver.

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~~29~~ (New)

The door leaf of claim ~~24~~¹³, wherein said stiff, light structural part comprises a nomex honeycomb structure.

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~~30~~ (New)

The door leaf of claim ~~24~~¹³, wherein said stiff, light structural part comprises an aluminum honeycomb structure.

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~~31~~ (New)

The door leaf of claim ~~24~~¹³, wherein said stiff, light structural part comprises a high resistance foam.